THE LIFE RECYCLO PROJECT Newsletter #1

March 2023



What is Life RECYCLO?

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Life RECYCLO is a European project, part of the European Commission's LIFE programme, which brings together six partners from three countries.

It aims to recycle effluents from laundries and reduce the discharge of pollutant substances in aquatic environments. To reach this goal, the project involves validating a patented treatment and recycling process through the implementation of prototypes.

This project is deployed in three laundries in France, Spain and Luxembourg, from 2021 to 2024.





RECYCLO in 2022

Technical achievements

The first year of the project was devoted to laboratory tests. Wastewater from each laundry was analysed and characterised. The effluents are in fact unique to each laundry, depending on the products used by the company and the provenance of the laundry washed. So treatment design needs to be tailored to each laundry.

A three-stage treatment process was defined: a pre-treatment phase by coagulation-flocculation, the advanced oxidation phase and a final adsorption stage using activated carbon. These three stages were then tested in a laboratory with the effluents from the three laundries.

And this treatment is conclusive: **it removed more than 90% of organic pollutants** (DEHP, PBDE, nonylphenols, etc.). However, some elements require further investigation: the containment of installations, the long-term performance of recycling and the adaptation to certain specific compounds to be treated (such as salts).

Survey

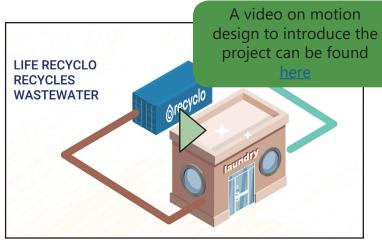
Alongside these technical trials, a social survey was also conducted among laundries and their customers **to assess their perception of wastewater reuse** in this context.

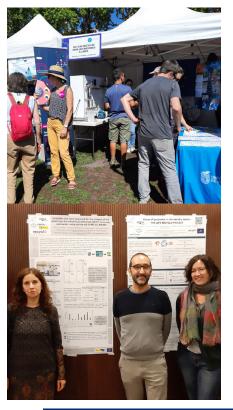
This survey showed that all the participants were **aware of the need to preserve water**. Furthermore, for both laundry managers and their customers, the environmental impact of the laundry sector is perceived as negative.

The majority of those interviewed were interested in recycling water for laundry, and the promises of the RECYCLO process were considered satisfactory. The only possible obstacles to the use of such a process are the need for proof of its effectiveness and the potential cost of installation.

Dissemination of the project

RECYCLO in the media: FUTUR ENVIRO Les Echos Le Progrès





RECYCLO was to be found at :

4 professional events in 2022

- IFAT Munich, 31 May, Munich (Germany)
- Technical day Management of hydric stress through the use of non-conventional water sources – INRAE, 15 September, Lyon (France)
- 18th Annual Workshop on emerging high-resolution mass spectrometry (HRMS) and LC-MS/MS application in environmental analysis and food society, 10 to 11 October, Barcelona (Spain)
- Plastic'2022, 21 to 22 November, Barcelona (Spain)

And also at two events for the general public

- Festival between Rhône and Saône, 2 to 3 July, Lyon (France)
- The Science Fair, 7 to 15 October, Lyon (France)



RECYCLO in 2023

Coming soon

The next step in the project is to **build prototypes** for each of the three laundries.

The first prototype will be deployed in **spring 2023 in the Spanish laundry**. The other two prototypes will be installed over the course of 2023. They will then be monitored and analysed until 2024.

At the same time, **video documentaries** will be made to document the project and raise awareness around the issues of water conservation.

Follow us on social networks:

@LifeRECYCLO

in @life-recyclo

And discover all our latest news on our website: www.treewater.fr/en/recyclo











You will be able to find us:

webinar: details here

details here

On 29 March, at INRAE's REUSE network

From 26 to 29 June at the IWA, Interna-

tional Conference on Eco-Technologies for

Wastewater Treatment, in Gerona (Spain):

Other dates coming soon: all our events here

tree⁽water.